Work Order	ID	100414
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100414

Page 1

April-22-13 1:	15:38 PM				/ 	***					
Item ID: Revision ID:	D3953-7			Accept	*N9000	า4ก	100)* s	Setup Start	171	S1*
Item Name:	Spring Space	er			· /*				Stop	*N:	S2*
Start Date:	5/09/13	Start Qty: 20.00	*20*		Cust Item II):					
Required Date	: 5/09/13	Req'd Qty: 20.00	*20*		Customer:						
Reference:	•										
Approvals:	Process P	lan: _ M(ブ	Date: 13-04-23	3 Tooling:	Dat	te:	_	F	tun Start	171	R1*
	QC:	, -	Date:	SPC (Y/N):	Da	te:			Stop	*N	R2*
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Re	evision Nbr									
D3953	C	:								-	
100				0.00							
100 Hardinge		Memo		0.00				26	P		
Hardinge CNC Lat	he Small	TURN AS P FOLIO REV DWG REV:		12	13-4-25						
		DEBURR									
110		QC2- Inspect parts off ma	achine FAI/FAIB	0.00			1	5 (4		
110 QC Ouality Control		Memo		0.00	13-4-25			16	_Ψ		

											DQA:	Date:	
NCR:	⁄es	/ No	i 			WORK ORDER NON-C	ON	IFORM	MANCE / UP	DATE	QA Closed:	Date:	
Work Orde	-	:				DISPOSITION Rework Scrap			Skid-tube Machining	AGAINST DE Crosstube Small Fab	Pro	Water Jet	Engineering Quality Other
NCR I	No	<u> </u>		···		Use-as-is Work Order Update		Thern	Large Fab	Finishing Composite	Kec/Stol	re/Packaging Supplier	Other
Root					Descri	ption of work order update	lı	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Chi	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data					-								
Equip/Tooling		i											
Operator							Ì						
Material													
Setup													
Other													
Process													
Supplier	П												

Ovalized Pressure/Forced Bend Grain Bending Temperature/Cure Over/Under tolerance BOM/Route Centre Not Concentric to O/S Hardware Weld Inspection Incomplete Part Incorrect Broken/Damaged Cracks Part Lost/Missing Wrong Stock Pulled Burrs Instructions Incomplete/Unclear Crushed/Crimped Maintenance Part Moved Cuffs Contamination Positioned Wrong Mislabeled Countersink Heat Treat Power Loss/Surge Other Misread Inspection Strip in Tube Cut Too Short Drill Holes Offset Ripples in Bend Out of Calibration Drawing Torque Waves in Extrusion Out of Sequence Turning Sequence Finish Wave/Twist in Tube Folio Outside Dimensions

FAULT CATEGORY

General

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Training Unapproved

Landing Gear

Work	Order	ID	100414
TIVIN	Oluci	11/	IVVTIT

100414

Page 2 April-22-13 1:15:38 PM Item ID: D3953-7 Accept *N900040100* Setup Start **Revision ID:** Stop **Item Name:** Spring Spacer **Start Qty: 20.00 Start Date:** 5/09/13 **Cust Item ID:** Required Date: 5/09/13 Req'd Qty: 20.00 **Customer:** Reference: Start Run Process Plan: Date: Tooling: **Approvals:** Date: Stop QC: Date:_____ SPC (Y/N): Date: Sequence ID/ **Operation** Set Up/ **Tool ID** Tool # Plan Reject Reject Accept Insp. Description Work Center ID Qty **Run Hours** Code **Qty** Number Stamp 120 QC8- Inspect parts - second check 0.00 *120* 13/04/25 OC 0.00 Memo Quality Control 130 Identify as per dwg & Stock Location: 0.00 *120* Packaging 0.00 Memo Packaging 140 QC21- Final Inspection - Work Order Release 0.00 *140* OC 0.00 Memo Quality Control

DQA:	Date:	

WORK ORDER NON-CONFORMANCE / UPDATE

NCR: Yes / No QA Closed: Date: **AGAINST DEPARTMENT/PROCESS** DISPOSITION Work Order: Engineering Skid-tube Water Jet Crosstube Rework Prod. Eng. Coor. Quality Small Fab Machining Part No. Scrap Thermoforming Finishing Rec/Store/Packaging Other Use-as-is Supplier Work Order Update Large Fab Composite NCR No. Sign & Description of work order update Action Initial Root **QC** Inspector Chief Eng Date Verification Qty Description or Non-conformance Date Step Cause Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Pressure/Forced Grain Ovalized Bending Bend BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Weld Broken/Damaged Part Incorrect Inspection Incomplete Cracks Wrong Stock Pulled Crushed/Crimped Instructions Incomplete/Unclear Part Lost/Missing Burrs Maintenance Part Moved Cuffs Contamination **Heat Treat** Countersink Mislabeled **Positioned Wrong** Other Misread Power Loss/Surge Inspection Strip in Tube Cut Too Short Offset **Drill Holes** Ripples in Bend Torque Waves in Extrusion Out of Calibration Drawing

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 1

Work Order ID:

100414

Parent Item:

D3953-7

Parent Item Name:

Spring Spacer

Start Date: 5/09/13

Required Date: 5/09/13

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP RevA: New issue DD verified by:EC

verified by:EC

IPP Rev:B as per dwg revC DD 10.03.02

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRINR0.750 Delrin Round Bar 0.75"		Purchased	No			100	f	224.1110	0.05	1.052632	27	. 13	-4-25
				Location		Loc Qty	Lo	c Code					
				MAT018		224.111							
				1161	83	4.8							
•				1172	73	4.665			***************************************				
				11732	22	0.94							

27.49

146.216

40

122582

121783

124834

124957

MDELRINRO.750 M122582

NCR: Y	es / No				WORK ORDER NON-C	ON	IFORI	MANCE / UP	DATE				
		!						_		(QA Closed:	Date	
Work Orde	r:				DISPOSITION				AGÁINST D	DEP	ARTMENT		_
Part N NCR N				 	Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite					Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
THE IT	NCR NO.				Work Order opadie	Work Order opaute			_		' ' -	· .	
Root Cause	Date	Step	Qty		ption of work order update or Non-conformance	l	nitial ief Eng		tion ription		Sign & Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved			qty										
		:				AUL	T CATE	GORY	· · · · · · · · · · · · · · · · · · ·				
Landir	Cracks Crushed Cuffs Heat Tre Inspection	lot conce /Crimped eat on Strip in in Bend	n Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Instruct Mainte Mislabe Misread Offset	ion Incomplete tions Incomplete/ enance eled	Unclear		Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Waves in Sequence		n _	Drawing Finish		l	Calibration Sequence		-			

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

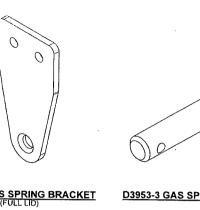
DART AEROSPACE LTD	Work Order:	100414
Description: Gas Spring Spacer	Part Number:	D3953-7
Inspection Dwg: D3953 Rev: C		Page 1 of 1

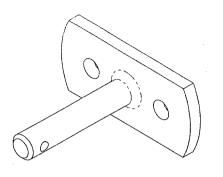
FIRST ARTICLE INSPECTION CHECKLIST

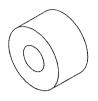
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.63	+/-0.030	.631	//		2/-6	Nerz
Ø0.257	+0.006/-0.001	,256				
0.37	+0.000/-0.030	, 339			. '	
•						
-						-
• •					1	
					· (1)	
					; i	•
					:	
						· ·
		· ·				
					97	
					2	
					1.7	
,	\		L			

Measured by:		Audited by:		AS	Preliminary Approval:	
Date: / 3 - 4 -	-25	Date:	10 (-8 9	Date:	,

Rev	Date	Change	Revised by	Approved
Α	09.10.22	New Issue	KJ	
В	09.12.14	Dwg Rev updated	KJ -	
С	10.06.07	Tolerance revised for dimension 0.37	KJ da	M
		·	771	









D3953-1 GAS SPRING BRACKET

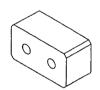
D3953-3 GAS SPRING STUD, LID

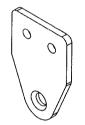
D3953-5 GAS SPRING STUD, BASE

D3953-7 GAS SPRING SPACER

D3953-9 GAS SPRING WASHER











D3953-11 GAS SPRING SPACER

D3953-13 GAS SPRING SPACER (FULL LID)

D3953-15 GAS SPRING BRACKET (SPLIT LID)

D3953-17 GAS SPRING SPACER (SPLIT LID)

D3953-19 GAS SPRING BRACKET (SQUARE BASKET)



D3953-21 GAS SPRING BRACKET (SQUARE BASKET) <u>&</u>

PARTS -19 & -21 ADDED (SHT 18 4); CSK CALLOUT WAS CHAM (C6-2, B6-3, C6-4); © SYMM WAS © SYM ABOUT (C7-2, C7-4); SECTION C-C REPOSITIONED TO B2-4 REASON: ADDL PARTS REQD; DRAFTING ERRORS JPH 10.01.29 SHEET 3 ZONE C1, DIM 0.05 MIN WAS 0.13, MULTIPLE DIMENSIONS MINMAX REMOVED TOLERANCE ADDED. REASON: DIFFICULTY INSTALLING COTTER PIN AT NEXT ASSY. AJS 09.11.11 NEW ISSUE AJS 09.07,27 REV. DESCRIPTION BY DATE DESIGN AJS DART AEROSPACE LTD DRAWN JPH HAWKESBURY, ONTARIO, CANADA DRAWING NO.

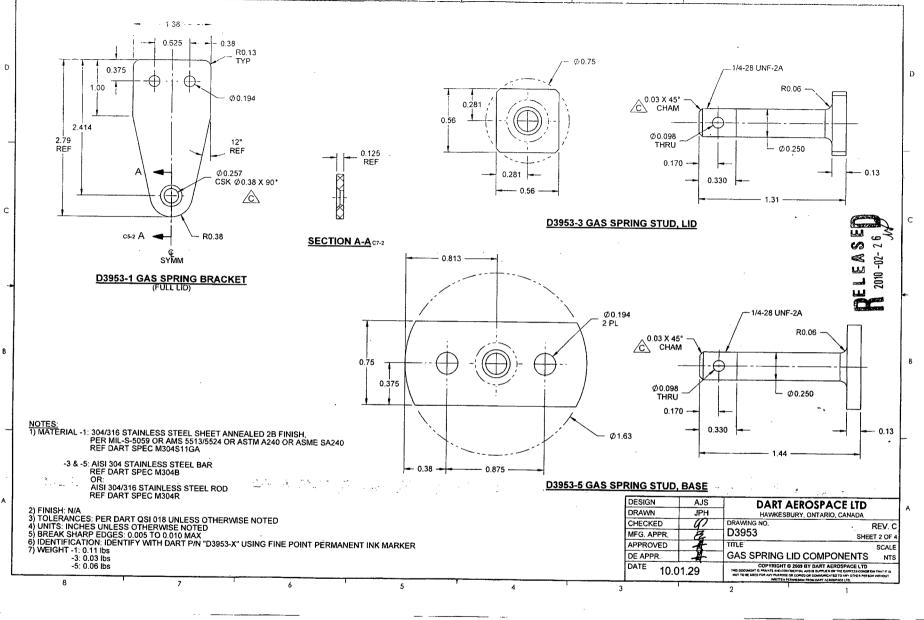
CHECKED MFG. APPR. APPROVED DE APPR. DATE

REV. C D3953 SHEET 1 OF 4 TITLE SCALE GAS SPRING LID COMPONENTS

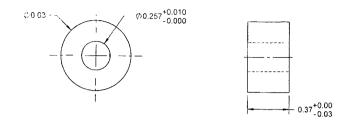
COPYRIGHT © 2009 BY DART AEROSPACE LTD 10.01.29

2

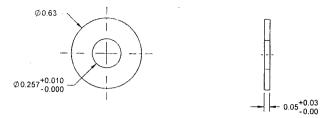
UNCOFEE STIL Vi. 13-04-23



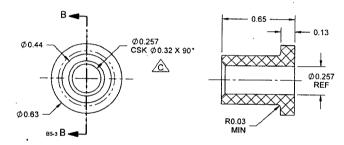
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D3953-7 GAS SPRING SPACER

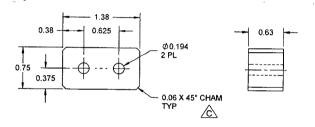


D3953-9 GAS SPRING WASHER



D3953-11 GAS SPRING SPACER

SECTION B-B 87-3



D3953-13 GAS SPRING SPACER

2010 -02- 26

DESIGN AJS DRAWN JPH		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA					
D3953 SHEET 3 OF 4							
APPROVED	-#-	TITLE SCALE					
DE APPR.		GAS SPRING LID COMPONENTS NTS					
DATE 10.0	1.29	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS HERNET AND CONFIDENTIAL AND IS SUPPLIED ON THE ESPRESS CONDITION THAT IT ID NOT TO BE USED FOR ANY PROFISS ON CORPOR OR COMMUNICATED FOR ANY OTHER PREPARED WITHOUT					

NOTES: 1) MATERIAL -7,-9 & -11: DELRIN II 150E OR ACETRON GP ACETAL, BLACK REF DART SPEC M-DELRIN-R

- -13: AISI 304 STAINLESS STEEL BAR REF DART SPEC M304B

* 10

- 2) FINISH: N/A
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION -13 ONLY: IDENTIFY WITH DART P/N "D3953-13" USING FINE POINT PERMANENT INK MARKER
 7) WEIGHT -7/-9/-11: < 0.01 lbs EACH
 -13: 0.17 lbs

